



Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Common Name	Varathane® Liquid Plastic Aerosol	Code	Liquid Plastic Aerosol Products
Supplier	The Flecto Company, Inc. 1000 45th Street Oakland, California 94608	MSDS#	March 1998
Synonym	90-81, 60-81, 91-81	TSCA Inventory	All ingredients have been reviewed.
Trade name	Varathane® Liquid Plastic	Validation Date	3/2/98
Material Uses	Use as interior wood finish.	Print Date	5/27/98
Manufacturer	Diversified Brands 31500 Solon Road Solon, OH 44139-3528	In case of Emergency	Emergency phone: 800-255-3924 For Information Call: 800-635-3286

Section 2. Composition and Information on Ingredients

Name	CAS #	% by Weight	TLV/PEL	LC ₅₀ /LD ₅₀
Mineral Spirits Acetone	064742478 67-64-1	<26.0 <22.0	TWA: 100 (ppm) TWA: 1000 (ppm)	Not available. ORAL (LD50): Acute: 3000 mg/kg [Mouse]. DERMAL (LD50): Acute: 20000 mg/kg [Rabbit]. VAPOR (LC50): Acute: 29853 ppm 4 hour(s) [Rat].
Methyl ethyl ketone	000078933	<11.0	TWA: 200 CEIL: 300 (ppm) TWA: 590 CEIL: 885 (mg/m ³)	ORAL (LD50): Acute: 2737 mg/kg [Rat]. 3400 mg/kg [Rat]. 3600 mg/kg [Rat]. DERMAL (LD50): Acute: 13000 mg/kg [Rabbit].
Toluol	000108883	<2.0	TWA: 100 CEIL: 150 (ppm) TWA: 375 CEIL: 560 (mg/m ³)	ORAL (LD50): Acute: 6520 mg/kg [Rat]. 2600 mg/kg [Rat]. DERMAL (LD50): Acute: 12210 mg/kg [Rabbit].
Xylene	001330207	<8.0	TWA: 100 CEIL: 150 (ppm) TWA: 435 CEIL: 655 (mg/m ³)	ORAL (LD50): Acute: 4300 mg/kg [Rat]. 6100 mg/kg [Rat].
Propane	000074986	<14.0	TWA: 1000 (ppm)	Not available.
Isobutane	000075285	<14.0	Not available.	Not available.

Section 3. Hazards Identification

Emergency Overview	EXTREMELY FLAMMABLE LIQUID AND VAPOR, VAPOR MAY CAUSE FLASH FIRE. CAUSES EYE IRRITATION. MAY CAUSE SKIN IRRITATION.
Potential Acute Health Effects	Very hazardous in case of eye contact (irritant). Hazardous in case of skin contact (irritant), of ingestion, of inhalation. Inflammation of the eye is characterized by redness, watering, and itching.
Potential Chronic Health Effects	CARCINOGENIC EFFECTS: Classified A5 (Not suspected for human.) by ACGIH [Acetone]. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not toxic. The substance is toxic to blood, kidneys, lungs, liver, the nervous system. Repeated or prolonged exposure to the substance can produce target organs damage.
Target Organs:	The substance is toxic to the nervous system, blood, kidneys, lungs, liver.

Continued on Next Page

Routes of Entry	Absorbed through skin. Eye contact. Inhalation. Ingestion.
Medical Conditions Aggravated by Overexposure:	Not available.
Signs and Symptoms of Overexposure:	Not available.

Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. COLD water may be used. DO NOT use an eye ointment. Seek medical attention.
Skin Contact	After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. COLD water may be used. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.
Hazardous Skin Contact	Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.
Inhalation	Allow the victim to rest in a well ventilated area. Seek immediate medical attention.
Hazardous Inhalation	Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.
Ingestion	DO NOT induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.
Hazardous Ingestion	No additional information.

Section 5. Fire and Explosion Data

Flammability of the Product	Flammable.
Auto-Ignition Temperature	Not available.
Flash Points	The lowest known value is CLOSED CUP: -104°C (-155.2°F). (TAG). (Propane)
Flammable Limits	The greatest known range is LOWER: 2.6% UPPER: 12.8% (Acetone)
Products of Combustion	These products are carbon oxides (CO, CO2).
Fire Hazards in Presence of Various Substances	Extremely flammable in presence of open flames and sparks, of heat. Flammable in presence of oxidizing materials, of reducing materials.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
Fire Fighting Media and Instructions	Flammable liquid. SMALL FIRE: Use DRY chemicals, CO2, alcohol foam or water spray. LARGE FIRE: Use alcohol foam, water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.
Special Remarks on Fire Hazards	Combustible. (Mineral Spirits) Container explosion may occur under fire conditions or when heated.
Special Remarks on Explosion Hazards	No additional remark.

Continued on Next Page

Section 6. Accidental Release Measures

Small Spill	Mop up or absorb with an inert DRY material and place in an appropriate waste disposal container.
Large Spill	Flammable liquid. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. DO NOT touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all sources of ignition. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7. Handling and Storage

Handling	After handling, always wash hands thoroughly with soap and water. Do not puncture, incinerate, store the container at temperatures above 49°C (120°F) or in direct sunlight.
Storage	Flammable materials should be stored in a separate safety storage cabinet or room. Keep away from heat. Keep away from sources of ignition. Keep container tightly closed. Keep in a cool, well-ventilated place. Ground all equipment containing material. Keep out of reach of children.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
Personal Protection	Splash goggles. Lab coat. Vapor and dust respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Gloves. Wear appropriate respirator when ventilation is inadequate.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Chemical Name or Product Name	CAS #	Exposure Limits
Mineral Spirits	064742478	TWA: 100 (ppm)
Dimethylketone	67-64-1	TWA: 1000 (ppm)
Methyl ethyl ketone	000078933	TWA: 200 CEIL: 300 (ppm) TWA: 590 CEIL: 885 (mg/m ³)
Toluol	000108883	TWA: 100 CEIL: 150 (ppm) TWA: 375 CEIL: 560 (mg/m ³)
Xylene	001330207	TWA: 100 CEIL: 150 (ppm) TWA: 435 CEIL: 655 (mg/m ³)
Propane	000074986	TWA: 1000 (ppm)
Isobutane	000075285	Not available.

Section 9. Physical and Chemical Properties

Physical state and appearance	Liquid.	Odor	Hydrocarbon.
Molecular Weight	Not applicable.	Taste	Not available.
pH (1% soln/water)	Not applicable.	Color	Light. Straw color.
Boiling/Condensation Point	Not applicable.		
Melting/Sublimation Point	Not applicable.		
Critical Temperature	Not available.		
Specific Gravity	0.73 (Water = 1)		
Vapor Pressure	The highest known value is 186.2 mm of Hg (@ 20°C) (Acetone).		
Vapor Density	The highest known value is 4.9 (Air = 1) (Mineral Spirits).		
Volatility	<90% (v/v).		
Odor Threshold	The highest known value is 2.14 ppm (Toluol)		
Evaporation rate	Not available.		

Continued on Next Page

Viscosity	Not available.
Water/Oil Dist. Coeff.	The product is more soluble in oil.
Ionicity (in Water)	Not available.
Dispersion Properties	Not available.
Solubility	The product is more soluble in oil.
Physical Chemical Comments	No additional remark.

Section 10. Stability and Reactivity Data

Chemical Stability	The product is stable.
Conditions of Instability	No additional remark.
Incompatibility with various substances	Reactive with oxidizing agents, reducing agents. Slightly reactive with acids, alkalis, moisture.
Hazardous Decomposition Products	Not available.
Hazardous Polymerization	No.

Section 11. Toxicological Information

Toxicity to Animals	WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE. Acute oral toxicity (LD50): 2600 mg/kg [Rat]. (Toluol). Acute dermal toxicity (LD50): 12210 mg/kg [Rabbit]. (Toluol). Acute toxicity of the vapor (LC50): 29853 ppm 4 hour(s) [Rat.]. (Acetone).
Chronic Effects on Humans	CARCINOGENIC EFFECTS: Classified A5 (Not suspected for human.) by ACGIH [Acetone]. DEVELOPMENTAL TOXICITY: Not toxic. The substance is toxic to blood, kidneys, lungs, liver, the nervous system.
Other Toxic Effects on Humans	Hazardous in case of skin contact (irritant), of ingestion, of inhalation.
Special Remarks on Toxicity to Animals	No additional remark.
Special Remarks on Chronic Effects on Humans	Embryotoxic and/or foetotoxic in animal. Detected in maternal milk in human. Passes through the placental barrier in human. (Methyl ethyl ketone)
Special Remarks on other Toxic Effects on Humans	Material is irritating to mucous membranes and upper respiratory tract. (Acetone)


Section 12. Ecological Information

Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	The products of degradation are less toxic than the product itself.
Special Remarks on the Products of Biodegradation	No additional remark.

Section 13. Disposal Considerations

Waste information	Use product or recycle. Consult local or regional authorities. Do not puncture or incinerate container or store at temperatures above 49°C.
Waste stream	Not available.

Section 14. Transport Information

DOT Classification	Consumer Commodity ORM-D	
Proper Shipping Name	Paint	
DOT Identification Number	ORM-D	
Packing Group	None.	
Maritime transportation	Not available.	
Hazardous Substances Reportable Quantity	Not available.	
Special Provisions for Transport	No additional remark.	
TDG Classification	TDG CLASS 3: Flammable liquid.	
ADR Classification	ADR CLASS: Flammable liquid A. Flammable liquid with a flash point lower than 21°C (70°F).	
IMDG Classification	IMDG CLASS 3: Flammable liquid.	
IATA Classification	IATA CLASS 3: Flammable liquid.	

Section 15. Regulatory Information

Federal and State Regulations	California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: Toluol; SARA 313 toxic chemical notification and release reporting: Toluol; Methyl ethyl ketone; Xylene; Glycol Ether; Diethylene glycol monobutyl ether; CERCLA hazardous substances: Diethylene glycol monobutyl ether;	
Other Classifications	WHMIS (Canada)	WHMIS CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). WHMIS CLASS D-2A: Material causing other toxic effects (VERY TOXIC). WHMIS CLASS D-2B: Material causing other toxic effects (TOXIC).
	Canadian Regulatory Lists	CEPA DSL: Xylene; Mineral Spirits
	DSCL (EEC)	R11- Highly flammable. R18- In use, may form flammable/explosive vapor-air mixture. R36- Irritating to eyes. R48- Danger of serious damage to health by prolonged exposure.
	International Regulatory Lists	No products were found.

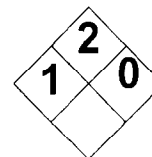
Section 16. Other Information

HMIS (U.S.A.)

Health Hazard	*	2
Fire Hazard		4
Reactivity		0
Personal Protection		J

National Fire
Protection
Association (U.S.A.)

Health



Fire Hazard

Reactivity

Specific hazard

References MSDS information of components.

Other Special Considerations This material is transported as a Consumer Commodity and is classed as ORM-D. This aerosol is less than 67% VOC by weight and complies with Air Quality Regulations in the USA. Packaged in 11.25 ounce steel aerosol containers.

Validated by Ken Trautwein on 3/2/98.

Verified by Jim Tuck.

Printed 5/27/98.

Emergency phone:

800-255-3924

For Information Call:

800-635-3286

Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.